CLAIMS

1. A method for diagnosing wood decay, wherein wood decay is judged through antigen-antibody reaction of contacting extract of wood to be examined with an antibody obtained by sensitizing an animal with an antigen which is a protein having a molecular weight of 1,000 to 100,000 obtained by culturing a wood-destroying fungus.

2. The method for diagnosing wood decay according to claim 1, wherein decay by multiple kinds of wood-destroying fungi is judged through antigen-antibody reaction of contacting extract of wood to be examined with an antibody obtained by sensitizing an animal with an antigen which is a protein having a molecular weight of 1,000 to 100,000 obtained by liquid-culturing a wood-destroying fungus.

3. The method for diagnosing wood decay according to claim 1 or 2, wherein the protein is obtained by culturing one wood-destroying fungus selected from the group consisting of *Fomitopsis palustris*, *Gloeophyllum trabeum*, *Coniophora puteana*, *Serpula lacrymans*, *Trametes versicolor* and *Gloeophyllum sepiarium*.

4. The method for diagnosing wood decay according to claim 3, wherein the protein is obtained by culturing *Fomitopsis*

palustris.

5. The method for diagnosing wood decay according to claim 1 or 2, detecting wood decay caused by at least one kind of wood-destroying fungus selected from the group consisting of *Fomitopsis palustris*, *Gloeophyllum trabeum*, *Coniophora puteana*, *Serpula lacrymans*, *Trametes versicolor*, and *Gloeophyllum sepiarium*.

6. The method for diagnosing wood decay according to claim 1 or 2, wherein determination through antigen-antibody reaction is carried out by dot-blot method or enzyme-linked immunosorbent assay (ELISA) method.

7. The method for diagnosing wood decay according to claim 6, using dot-blot method in determination of decay in the wood to be examined, wherein a substrate for dot-blotting, having a porous membrane, is prepared in a device structured to instruct or record spotting positions and the spotting positions of the substrate are spotted with extract of the wood to be examined.

8. The method for diagnosing wood decay according to claim 7, wherein a substrate for dot-blotting is spotted with a standard sample which has been extracted from wood having a known degree of decay and comparison between the spots of the standard sample and the test sample is conducted to determine the degree

of decay of the test sample.

9. An agent used for diagnosing wood decay, which comprises an antibody obtained by sensitizing an animal with an antigen which is a protein having a molecular weight of 1,000 to 100,000 obtained by culturing a wood-destroying fungus and which agent is contacted with extract of wood to be examined in determination of the decay.

10. The agent used for diagnosing wood decay according to claim 9, wherein the antibody is obtained by sensitizing an animal with a protein having a molecular weight of 1,000 to 100,000 obtained by culturing one wood-destroying fungus selected from the group consisting of *Fomitopsis palustris*, *Gloeophyllum trabeum*, *Coniophora puteana*, *Serpula lacrymans*, *Trametes versicolor* and *Gloeophyllum sepiarium*.

11. The agent used for diagnosing wood decay according to claim 10, wherein the antibody is obtained by sensitizing an animal with a protein having a molecular weight of 1,000 to 100,000 obtained by culturing *Fomitopsis palustris*.

12. The agent used for diagnosing wood decay according to any one of claims 9 to 11, wherein the antibody is obtained from an animal sensitized with an antigen solution containing a protein having a molecular weight of 1,000 to 100,000 obtained by

subjecting a culture liquid to ultrafiltration or gel filtration after culturing a wood-destroying fungus in a liquid medium at 10 to 40 °C.

13. The agent used for diagnosing wood decay according to any one of claims 9 to 11, comprising the antibody as antiserum.

14. The agent used for diagnosing wood decay according to any one of claims 9 to 11, comprising the antibody as purified protein.

15. The agent used for diagnosing wood decay according to claim 14, comprising the antibody as polyclonal antibody.

16. The agent used for diagnosing wood decay according to any one of claims 9 to 11, comprising the antibody as monoclonal antibody.

17. A test kit for diagnosing decay in wood, including a substrate for dot-blotting, having a porous membrane prepared in a device structured to instruct or record spotting positions and the diagnosis agent according to any one of claims 9 to 16.

18. The test kit for diagnosing decay in wood according to claim 17, wherein the substrate for dot-blotting is spotted with a standard sample extracted from wood having a known decay degree.